THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte EDWARD J. TOWNS

_____

Appeal No. 96-4162
Application 08/313,901[1]

_____

ON BRIEF

_____

Before MEISTER, McQUADE and BAHR, Administrative Patent Judges.

BAHR, Administrative Patent Judge.

DECISION ON APPEAL

Edward J. Towns appeals from the final rejection of claims 1 through 6, all of the claims pending in the application.

The invention relates to "an improved method for molding containers, the finish of which includes a frusto-conical sealing area" (specification, page 1). As best seen in

[1] Application for patent filed September 28, 1994.

Figure 2, the molding process of the invention uses a mold having at least three parts including an end member (21) and a pair of side members (30 and 31). The inner surface of the end member (21) is provided with a frusto-conical recess (25). The molded container is thus free of "either axially oriented or transversely oriented parting lines on the sealing surface itself" (specification, page 3). The process of the invention also includes providing a transfer ring (12) and a closure engaging surface (16) on the container.

Claims 1 and 3 are representative and read as follows:

1. In the process of molding a container having a finish at an open end thereof in which the end of the finish is provided with an end surface and a frusto-conical sealing area thereon, including the steps of providing a mold having at least three parts including an end member and a pair of side members forming the end and side surfaces of said finish, said end and side members being positioned in abutted relation during a molding operation; the additional step of: forming an axially extending recess in an inner surface of said end member corresponding to the end surface and said frusto-conical sealing area whereby all parting lines formed by said mold members during molding are positioned outside said frusto-conical sealing area.

3. An improved mold for containers having a finish incorporating a frusto-conical sealing surface on an outer surface thereof adjacent the end of said finish; said mold comprising at least an axially displaceable end member having a recess therein enclosing said frusto-conical sealing area, and a pair of laterally displaceable side members forming the remaining outer surfaces of said finish.

The examiner has rejected claims 1 through 6 under the first paragraph of 35 U.S.C. § 112 as being based on a specification which fails to provide an enabling disclosure of how to make and/or use the invention and under 35 U.S.C. § 101 as being directed to an inoperative invention. Additionally, the examiner has rejected the claims as

being unpatentable under 35 U.S.C § 103. For the reasons discussed below, we reverse these rejections. We reject claims 1 through 4 and 6, however, under 35 U.S.C. § 102(b), pursuant to the provisions of 37 CFR § 1.196(b).

The references relied upon by the examiner as evidence of obviousness are:

Wilkinson et al. (Wilkinson)	3,556,338	Jan. 19, 1971
Baugh	3,592,349	Jul. 13, 1971
Schwartzburg et al. (Schwartzburg)	4,201,360	May 6, 1980
Luther (Luther '891)	4,881,891	Nov. 21, 1989
Luther (Luther '898)	5,167,898	Dec. 1, 1992
Zushi	5,183,615	Feb. 2, 1993

The additional reference relied upon by this panel is:

Blenkush	5,033,777	Jul. 23, 1991

Rejection under 35 U.S.C. § 112, first paragraph

Claims 1 through 6 stand rejected under the first paragraph of 35 U.S.C. § 112 as being based on a specification which fails to provide an enabling disclosure of how to make and/or use the invention.

The examiner's explanation indicates that the specification is not considered to comply with the enablement requirement of the first paragraph of 35 U.S.C. § 112 because:

> The specification does not disclose how to form a container. Figure 2 does not show and the specification does not teach how to form a container. The mold surfaces in figure 2 would form a solid article wherein a solid article would not have a

portion to contain a beverage [answer, page 4].

The examiner further argues that different methods of forming a hollow container are possible and that all of these different methods would have different effects on the opening of the mold and removal of the molded part (answer, page 7).

On page 7 of the main brief, the appellant argues:

> It is noted that although Examiner complains that the specification fails to adequately teach how to make and/or use the invention, i.e., it fails to provide an enabling disclosure, the Examiner has not indicated any aspect of the disclosure which he does not understand, or any aspect which is necessary to permit a person skilled in the art to carry out the invention. Her comments are nothing more than a recitation of Section 112 itself.

With regard to the examiner's comments on the different effects of the different possible methods of forming hollow containers, the appellant urges that the examiner has not elaborated on why these different effects would have any effect on the appellant's invention "which concerns itself only with the outer surface of the molded container, rather than the inner surface" (reply brief, page 3).

Insofar as the enablement requirement is concerned, the dispositive issue is whether the appellant's disclosure, considering the level of ordinary skill in the art as of the date of the appellant's application, would have enabled a person of such skill to make and use the appellant's invention without undue experimentation. In re Strahilevitz, 668 F.2d

1229, 1232, 212 USPQ 561, 563-64 (CCPA 1982). In calling into question the enablement of the appellant's disclosure, the examiner has the initial burden of advancing acceptable reasoning inconsistent with enablement. Id.

In determining that the specification is non-enabling, the examiner has noted that the disclosure of the method of forming the hollow interior of the container is lacking but has not advanced a reason why one of ordinary skill in the art would not have known how to form a hollow article using the invention disclosed in the appellant's specification without undue experimentation. The issues involved with the molding of a hollow article are straight-forward and predictable. Although the examiner has pointed out that the numerous options available for forming the hollow may yield different results, the examiner has not advanced any explanation as to why one of ordinary skill in the molding art would not have been able to (1) recognize the need for forming a hollow region in the article, (2) contemplate options and their various consequences and (3) select from among these options without undue experimentation to mold a hollow article possessing the desired characteristics according to the disclosed invention, i.e., free of parting lines on the frusto-conical sealing surface.

Accordingly, we shall not sustain the standing rejection of claims 1 through 6 under 35 U.S.C. § 112, first paragraph, as being based on a non-enabling specification.

Rejection under 35 U.S.C. § 101

Claims 1 through 6 stand rejected under 35 U.S.C. § 101 because the invention as claimed and disclosed is inoperative and thus lacks utility.

The examiner's basis for this rejection is that "[t]he disclosure does not show any type of structure which would form a container because there is no teaching for forming a hollow surface in the container" (answer, page 4).

In rejecting claims under 35 U.S.C. § 101 as being directed to an invention which is inoperative, "the PTO must do more than merely question operability - it must set forth *factual* reasons which would lead one skilled in the art to question the objective truth of the statement of operability." In re Gaubert, 524 F.2d 1222, 1224-25, 187 USPQ 664, 666 (CCPA 1975). In questioning the operability of the appellant's invention, the examiner has merely pointed to the lack of disclosure of the method of forming a hollow surface in the container, the same reasoning used in rejecting the claims under 35 U.S.C. § 112, first paragraph. We find this reasoning just as unpersuasive with respect to operability.

Therefore, we shall not sustain the standing rejection of claims 1 through 6 under 35 U.S.C. § 101.

Rejection under 35 U.S.C. § 103

Claims 1 through 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over any one of Luther '891, Luther '898, Schwartzburg or Zushi in view of either Wilkinson

or Baugh.[2]

Luther '891 discloses a mold apparatus comprising, inter alia, a first fixed end plate (22) having an interior surface (26) which acts as a portion of the mold cavity and includes a recessed area (33), outlet nozzles (31) in the recessed area for admission of heated resin into the mold cavity, four mold side walls (151 through 154 - best seen in Figures 2 and 3) each having a molding surface (170), plate member (132) defining a supporting surface (133), axially moveable support member (110) for supporting the plate member (132) and the mold side walls, and a plurality of hydraulic cylinders (172) for moving the mold side walls laterally between an open and closed position. A collapsible core arrangement, described in column 3, last two paragraphs, and column 5, lines 1 through 19, facilitates removal of the molded article (177) from the movable core members.

Luther '898 discloses an injection mold assembly and method for producing a plastic tub having recessed drain holes (column 1, lines 9 through 14). The mold assembly comprises, inter alia, a mold plate (40) including an inwardly facing molding surface (48), two laterally movable side plates (76) each having a molding surface (77) and a mold core

[2] In view of the identification of both Luther '891 and Luther '898 in the listing of prior art of record relied upon in the rejection of the claims on appeal in section (9) on page 3 of the answer and the arguments of both the examiner and the appellant, "Luther" as used in the examiner's statement of the rejection on page 5 of the answer is interpreted as including both Luther '891 and Luther '898 as alternative primary references. Accordingly, each of these references has been discussed separately in this decision.

(54). As shown in Figure 3, the surface of the mold core (54) is provided with a plurality of teardrop-shaped projections (60). The resulting drain holes (24) formed in the molded tub (16) by core pins (80) are thus recessed in teardrop-shaped depressions (28) formed in the tub such that fabrics in the tub are not snagged on the edges of the holes (column 6, lines 2 through 5).

Schwartzburg discloses an injection molding apparatus and method for molding embossed plastic articles (column 1, first paragraph). The mold apparatus comprises, inter alia, a movable upper platen (13) supporting core (15) having an outer molding surface (15a) and lower stationary platen (10) which supports a cavity piece (11) having a mold surface (11a) and a small block (17). An injection passage extends through the lower stationary platen (10) and the small block (17) to admit liquid plastic resin. Engraved areas (12) are cut into the mold surface (11a) to form bosses (30) on the article.

Zushi discloses a method of molding a cover for housing an air bag device (column 1, lines 5 through 8). An exemplary cover is illustrated in Figures 1 and 2. The method uses a mold comprising a frame mold (15) for molding of the peripheral section of the cover, upper mold (16) to form the upper surface of the cover, and central mold (12) and lateral molds (13, 14) for forming the hollow sections of the cover. The steps of removing the molded cover from the mold assembly, which involve sliding movement of the lateral molds (13, 14) along the mating surfaces of the central mold to move the lateral molds (13,

14) out of contact with the undercut portions of the cover, are explained at column 3, lines 9 through 29.

Wilkinson discloses a container (5) comprising a rim (8) having an outer surface (10) which slopes downwardly and outwardly from point (11) on the upper edge of the rim to a point (12) intersecting with a horizontal lip (13). Wilkinson discloses that the container may be made of metal, glass or relatively rigid plastic material (column 2, lines 34 and 35) but does not disclose a method of making the container.

Baugh discloses a similar container comprising, inter alia, an inwardly converging (frusto-conical) sidewall surface (14) at the top of the neck of the container. The converging sidewall surface (14) merges into a shoulder (15). Baugh discloses that the container may be made of plastic, metal or glass (column 6, lines 5 through 7) but does not specify any method of making the container.

In rejecting claims 1 through 6, the examiner has stated:

> Each primary reference discloses a process of forming a hollow article using a mold end member with a recess. The end member being shaped to form a frusto-conical sealing would have been an obvious design choice depending upon the desired shape of the area because the shaping of a mold surface to the shape of the article to be molded is the basic principle of molding. Wilkinson and Baugh each teach the well known shape of a container with frusto-conical sealing area which would have obviously been molded using molds having surfaces corresponding to the container surface [answer, page 5].

The appellant's arguments, which can be found in the main brief on pages 8, 9 and

11, are summarized as follows. Each of the primary references Luther '891, Luther '898, Schwartzburg and Zushi uses a mold apparatus comprising several mold members which will leave parting lines on the outside of the molded article when separated. Neither of the secondary references Wilkinson or Baugh provides "disclosure as to any molding techniques employed or any of the problems or their solution contemplated by Applicants" (main brief, page 9). The appellant questions the examiner's contention that the primary references each clearly show that the parting lines formed by the mold members will fall outside the frusto-conical region (main brief, page 9). The appellant's reference to In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) on page 11 of the main brief is interpreted as an argument that the examiner impermissibly relied upon hindsight reconstruction of the appellant's invention to combine the references so as to arrive at the determination of obviousness. We agree.

Rejections based on 35 U.S.C. § 103 must rest on a factual basis. In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 177-78 (CCPA 1967).

In the mold apparatus of Luther '891, the molding surfaces (170) of mold side walls (151 through 154) combine with the surface (133) and recess (33) to form the exterior side

surface of the molded article. Even if Luther ‘891 were combined with either Wilkinson or Baugh in the manner proposed by the examiner to form a container having a frusto-conical seal area, we find no teaching in the references which would support the examiner’s conclusion that it would have been obvious to modify either the interior recess (33) of end plate (22) or the supporting surface (133) of plate member (132) of the mold, as opposed to side molding surfaces (170), to enclose or correspond to the frusto-conical sealing area of the molded article, as required by independent claims 1 and 3. In other words, the examiner has resorted to speculation, unfounded assumptions and/or hindsight reconstruction to supply this deficiency.

Regarding Luther ‘898, it is initially noted that the invention disclosed therein is particularly directed to the formation of plastic washing machine tubs or similar articles having recessed holes therein. Thus, it is not apparent why one of ordinary skill in the molding art would look to such an apparatus as a starting point for molding the types of containers disclosed by Wilkinson or Baugh which do not comprise such recesses or holes. Moreover, even if Luther ‘898 were combined with either Wilkinson or Baugh as proposed by the examiner, we find no teaching or suggestion in any of these references to support the examiner’s contention that the inclusion of an end member having a recess therein enclosing or corresponding to the frusto-conical sealing area as required by independent claims 1 and 3 would have been obvious. For the above reasons, it is

apparent that the reference combination proposed by the examiner stems only from an impermissible hindsight reconstruction of the appellant's invention.

In the mold of Schwartzburg, all side surfaces of the molded article are formed by the mold surface of cavity piece (11), not by an axially displaceable end member in combination with two side members. Thus, even if Schwartzburg were combined with either Wilkinson or Baugh as proposed by the examiner, we find no teaching in the references which would support the examiner's conclusion that an end member having a recess enclosing the frusto-conical sealing area, in combination with two side members as required by independent claims 1 and 3, would have been an obvious design choice. In other words, the examiner has resorted to speculation, unfounded assumptions and/or hindsight reconstruction in reaching this conclusion.

Given the very disparate shapes of the airbag cover molded by the method of Zushi and the container disclosed by either Wilkinson or Baugh, it is not apparent why one of ordinary skill in the molding art would look to the Zushi method as a starting point for molding the type of container disclosed by Wilkinson or Baugh. Moreover, even if Zushi were combined with either Wilkinson or Baugh as proposed by the examiner, we find no teaching in any of these references to support the examiner's conclusion that it would have been obvious to include in the mold an end member enclosing the frusto-conical sealing area and two side members, as required by independent claims 1 and 3. Therefore, it is

apparent that the reference combination proposed by the examiner stems only from an impermissible hindsight reconstruction of the appellant's invention wherein the examiner has used the claims as a template to selectively piece together isolated disclosures in the prior art.

For the reasons discussed above, we shall not sustain the standing 35 U.S.C. § 103 rejection of independent claims 1 and 3, or claims 2 through 4 and 6 which depend therefrom, as being unpatentable over any one of Luther '891, Luther '898, Schwartzburg or Zushi in view of either Wilkinson or Baugh.

NEW GROUND OF REJECTION UNDER 37 CFR § 1.196(b)

Under the provisions of 37 CFR § 1.196(b), we make the following new ground of rejection.

Claims 1 through 4 and 6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Blenkush.

With regard to claims 1 and 3, Blenkush discloses a mold apparatus and method for molding a male insert (12), the insert comprising a part line free cylindrical seal (20). The cylindrical seal is frusto-conical in shape (column 6, lines 9 through 12). The mold apparatus comprises a longitudinally retractable mold element member (54) for forming the part line free cylindrical seal (column 7, lines 19 through 24) and two laterally

displaceable side members (mold elements 50 and 52) for forming the remainder of body portion (16) of the insert (column 7, lines 4 through 8), as well as a second longitudinally retractable mold element member (62) to form the fluid pathway (25) through the insert (column 7, lines 35 through 40). Further, the mold element (54) includes an end recess or cavity (56) corresponding to the end surface and frusto-conical seal (20) of the insert (column 7, lines 28 through 34). Although the embodiment of the insert shown includes a puncturable membrane member (64) extending across the first end (26) which is formed by leaving a gap between the mold element (54) and the mold element (62), other embodiments of the male insert need not have such a membrane member present (column 7, lines 65 through 67).

As to claim 2, as discussed above, the remainder of the outside surface of the insert, outside of the seal (20) is formed by the two laterally displaceable mold elements (50, 52).

As to claim 4, as shown in Figure 3, the mold element (54) and mold elements (50, 52) abut at the larger peripheral edge of the frusto-conical surface of the seal (20). Accordingly, the parting line formed by the edge of the cavity (56) and the two mold elements (50, 52) will be located at the larger peripheral edge.

As to claim 6, the mold elements (50, 52) undercut the cylindrical seal (20) to form a relatively sharp shoulder portion (72) extending transversely to the axis of the insert

(column 8, lines 10 through 13). This shoulder forms a surface which is capable of engaging the bead of a closure.

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

Claims 1 through 4 and 6 require a process and a mold for molding a “container.” The insert (12) does contain fluids therein within a fluid handling system and, thus is considered to be a “container” as broadly claimed. That the male insert (12) of Blenkush is not a bottle or similar container for storing beverages, as taught by the appellant (specification, page 1) is not relevant to the issue of anticipation. See Id.

Further, regarding claim 6, the appellant argues that Blenkush does not disclose

formation of a closure engaging surface as claimed (main brief, page 10). The appellant's specification teaches provision of an arcuate closure engaging surface (16) wherein the angle of the surface (16) may be altered to vary the degree of purchase obtained by a beaded edge of a closure (specification, page 7). Blenkush does not disclose the use of shoulder (72) as a closure engaging surface or the variation of the angle or contour of the shoulder for the purpose of varying the degree of purchase obtained thereby. However, the disclosed 90-degree angle of the shoulder surface with the axis of the insert is capable of establishing a degree of purchase with respect to such a bead. Accordingly, the molding of shoulder (72) disclosed by Blenkush satisfies the step of forming a closure engaging surface as recited in claim 6.

This decision contains new grounds of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63,122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides that "[a] new ground of rejection shall not be considered final for purposes of judicial review."

37 CFR § 1.196(b) also provides that the appellant, WITHIN TWO MONTHS FROM

THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner. . . .
>
> (2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record. . . .

In summary, we have reversed the examiner's rejections of claims 1 through 6 under 35 U.S.C. § 112, first paragraph, 35 U.S.C. § 101 and 35 U.S.C. § 103 and we have rejected claims 1 through 4 and 6 under 35 U.S.C. § 102(b) as being anticipated by Blenkush, pursuant to the provisions of 37 CFR § 1.196(b).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REVERSED - 37 CFR § 1.196(b)

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Administrative Patent Judge	)
	)
	)
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